### West Virginia Department of Environmental Protection Division of Air Quality

## **Fact Sheet**



# For Final Significant Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

This Fact Sheet serves to address the changes specific to this Significant Modification, and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on December 28, 2006.

Permit Number: R30-05100002-2006 Application Received: May 18, 2009 Plant Identification Number: 003-054-051-00002

Permittee: **PPG Industries, Inc.** Facility Name: **Natrium Plant** 

Mailing Address: P.O. Box 191, New Martinsville, West Virginia 26155

Permit Action Number: SM03 Revised: September 14, 2009

Physical Location: New Martinsville, Marshall County, West Virginia
UTM Coordinates: 512.70 km Easting • 4,399.60 km Northing • Zone 17
Directions: WV State Route 2, 5 miles north of New Martinsville, WV

#### **Facility Description**

PPG Industries, Inc. owns and operates a Chlor-Alkali and Derivatives Plant in Marshall County, West Virginia commonly known as the PPG Natrium Plant. For details concerning the operations and products of the facility, refer to the fact sheet that accompanies the initial permit.

In October of 2008, PPG received a permit to install the #1 HCl Synthesis Unit, which produces 36% hydrochloric acid from the direct synthesis of hydrogen and chlorine. This permit modification will facilitate the installation of the #2 HCl Synthesis Unit, which duplicates the #1 HCl Synthesis Unit.

#### **Emissions Summary**

This permit modification will result in the following Potential to Emit (PTE) increases:

	Increase in PTE	
Pollutant	lb/hr	рру
HC1	0.62	561.02
Cl	0.02	140.16

#### Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit over 100 tpy of a criteria pollutant, 10 tpy of single HAP, and 25 tpy of aggregate HAPs. Due to this facility's potential to emit over 100 tpy of a criteria pollutant, 10 tpy of single HAP, and 25 tpy of aggregate HAPs, PPG Industries, Inc., Natrium Plant, is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

#### **Legal and Factual Basis for Permit Conditions**

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State:

45CSR13 Construction permit requirements.
45CSR30 Operating permit requirement.

State Only: None

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

#### **Active Permits/Consent Orders**

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (if any)
R13-2046C	July 10, 2009	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

#### **Determinations and Justifications**

#### **Permit Changes**

This modification incorporates the following changes:

- a. The Emission Units Table (Section 1.0) was updated to include all new equipment necessary for #2 HCl Synthesis Unit.
- b. The emission limits in Section 7.1.1., tank throughput limits in Section 7.1.2., and HCl limits in Section 7.1.3. were updated.
- c. The #5 HCl tank (V122) was added to Section 7.1.10, which specifies the minimum control efficiency for the acid fume scrubbers. The scrubbers control breathing and working losses generated by HCl storage tanks.
- d. V122 was removed from Section 7.1.17. With the changes made in this modification, V122 is no longer a Group 2 storage vessel. It is now a Group 1 storage vessel.
- e. Scrubber SC161 was added to Section 7.1.36, which specifies operating requirements for the tail towers.
- f. Emission Point E996 was added to Section 7.1.38., which limits emissions from the HCl synthesis
- g. The testing requirement of Section 7.3.5. was reworded to clarify that only one unit (SU994) needs to be tested.
- h. The HCl emission factors contained in Example Data Form III of Appendix C were updated.

#### Removal of the Para Room (B018)

Two existing storage tanks, the Molding Machine Circulating Tank (V149) and the Molding Machine Product Tank (V150), have previously been grouped together and identified as the Para Room (B018) and permitted to store dichlorobenzene. With this permit modification, they have been converted to the #1 and #2 Condensate Tanks. Since no emission points are associated with them, they have been deemed as trivial sources and removed from this permit.

#### **Non-Applicability Determinations**

The following requirements have been determined not to be applicable to the subject facility due to the following:

#### 1. 40 CFR Part 63 Subpart NNNN

The new equipment installed to support the production of 36% hydrochloric acid is not subject to the requirements of 40 CFR Part 63 Subpart NNNNN, the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Hydrochloric Acid Production, as #2 HCl Synthesis Unit (SU005) produces HCl through the direct synthesis of hydrogen and chlorine and is part of a chlor-alkali facility as exempted in 40CFR 63.8985(d).

2. 40 CFR Part 64 Compliance Assurance Monitoring (CAM)

The MCB department, which includes the HCl synthesis units, are regulated under 40 CFR Part 60, Subpart RRR and 40 CFR Part 63, Subparts F, G, and H. These regulations were all proposed after November 15, 1990. Therefore, in accordance with 40 C.F.R. §64.2(b)(1)(i), the #2 HCl Synthesis Unit is not subject to 40 C.F.R. Part 64 (CAM).

#### **Request for Variances or Alternatives**

None.

#### **Insignificant Activities**

Insignificant emission unit(s) and activities are identified in the Title V application.

#### **Comment Period**

Beginning Date: July 23, 2009 Ending Date: August 24, 2009

All written comments should be addressed to the following individual and office:

Rex Compston
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57<sup>th</sup> Street SE
Charleston, WV 25304

#### **Procedure for Requesting Public Hearing**

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

#### **Point of Contact**

Rex Compston
West Virginia Department of Environmental Protection
Division of Air Quality
601 57<sup>th</sup> Street SE
Charleston, WV 25304

Phone: 304/926-0499 ext. 1209 • Fax: 304/926-0478

#### **Response to Comments (Statement of Basis)**

Not applicable.